

TMDL Name: Leesville Pond, Auburn and Worcester, MA (MA51087)

Lead State: Massachusetts

TMDL Status: Approved

Pollutant ID: Total Phosphorus

TMDL end point: 40.5 ppb Total Phosphorus (TP)

List ID: MA51087

Impairment ID: Nutrients; Organic enrichment/Low DO

Cycle: 1998

TMDL type: both point source and non-point source

TMDL (final) submittal date: May 30, 2002

Actual establishment date: June, 2002

Notice to public date: Nov., 1999

EPA NEW ENGLAND'S TMDL REVIEW

TMDL: Leesville Pond, Auburn and Worcester, MA (MA51087)

Date: May 30, 2002

STATUS: Final

IMPAIRMENT/POLLUTANT: Nutrients (Code 0900), Organic Enrichment and Low Dissolved Oxygen (Code 1200). TMDL is developed for Total Phosphorus.

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BACKGROUND: The Massachusetts Department of Environmental Protection (MADEP) submitted to EPA New England the *Final Total Maximum Daily Load for Leesville Pond, Auburn-Worcester, MA, dated February 26, 2002*. The following is a summary of EPA's review which explains how the TMDL submission satisfies the statutory and regulatory requirements of TMDLs in accordance with Section 303(d) and 40 CFR Part 130. In addition to reviewing the TMDL document, EPA-New England also reviewed the 1990 report by Ganzon and Sutt, *Diagnostic/Feasibility Study of Leesville Pond* (D/F study), and a recent analysis by MADEP, which included a reassessment of the D/F study, which provides the technical basis for the TMDL.

REVIEW ELEMENTS OF TMDLs

Section 303(d) of the Clean Water Act (CWA) and EPA's implementing regulations at 40 C.F.R. § 130 describe the statutory and regulatory requirements for approvable TMDLs. The following information is generally necessary for EPA to determine if a submitted TMDL fulfills the legal requirements for approval under Section 303(d) and EPA regulations, and should be included in the submittal package. Use of the verb "must" below denotes information that is required to be submitted because it relates to elements of the TMDL required by the CWA and by regulation.

1. Description of Waterbody, Pollutant of Concern, Pollutant Sources and Priority Ranking

The TMDL analytical document must identify the waterbody as it appears on the State/Tribe's 303(d) list, the pollutant of concern and the priority ranking of the waterbody. The TMDL submittal must include a description of the point and nonpoint sources of the pollutant of concern, including the magnitude and location of the sources. Where it is possible to separate natural background from nonpoint sources, a description of the natural background must be provided, including the magnitude and location of the source(s). Such information is necessary

*for EPA's review of the load and wasteload allocations which are required by regulation. The TMDL submittal should also contain a description of any important assumptions made in developing the TMDL, such as: (1) the assumed distribution of land use in the watershed; (2) population characteristics, wildlife resources, and other relevant information affecting the characterization of the pollutant of concern and its allocation to sources; (3) present and future growth trends, if taken into consideration in preparing the TMDL; and, (4) explanation and analytical basis for expressing the TMDL through surrogate measures, if applicable. Surrogate measures are parameters such as percent fines and turbidity for sediment impairments, or chlorophyll *a* and phosphorus loadings for excess algae.*

The Leesville Pond TMDL adequately describes the waterbody, which is located in the Blackstone River Watershed in the town of Auburn and city of Worcester. The lake, which was formed by damming Kettle Brook in about 1830, covers an area of approximately 50.5 acres (20.4 ha) and is bisected by U.S. Interstate 290. According to MADEP, the lake is better described as a 'run-of-the-river' impoundment than a lake because of its fast flushing time of only about two days (See TMDL, p. 9-12).

During large storms, the Worcester Diversion diverts flood waters from Kettle Brook into a tunnel and canal system and discharges water to the Blackstone River about 3.5 miles downstream; MADEP estimates that less than 10% of the normal yearly flow of Kettle Brook is diverted.

The document notes that the causes of impairment, as identified on the MA 1998 303(d) list, are nuisance aquatic plants and organic enrichment and low dissolved oxygen (MA DEP, 1998). The document states that high phosphorus loading from the lake's watershed causes the lake to experience nuisance algae blooms, excessive macrophyte growth, and growth of Lemna (duckweed), especially in an area called the 'south basin', which MADEP describes as 'essentially stagnant' (See TMDL, p. 10). This TMDL proposes to address water quality problems related to phosphorus loading to the lake by a combination of improved watershed management techniques and by increasing flow through the southern basin by replacing the existing culvert with a discharge pipe that will allow increased flushing.

Organic enrichment and Low Dissolved Oxygen (Code 1200) are another cause of impairment in the pond. Although, phosphorus loading is known to contribute indirectly to organic enrichment and low Dissolved Oxygen due to increased aquatic plant growth, this TMDL does not explicitly address low DO. If reduced phosphorus loading and improved flow circulation does not correct the DO problem, MA DEP will need to develop a TMDL to address this impairment.

The magnitude and location of total phosphorus sources are identified according to landuse categories. The analytical approach entailed use of MADEP's landuse-export model, NPSLAKE, (Mattson and Isaac, 1999), which includes three landuse categories (forest, rural, and urban). MADEP, however, breaks these three categories into more detailed categories (forest, agriculture, open land, residential (low density), residential (high density), and commercial-industrial) when assigning TMDL load allocations. Septic systems within 100 m of the lake (i.e.,

the main groundwater source of phosphorus) are also included in the NPSLAKE model, although no septic systems are reported in the vicinity of Leesville Pond. The NPSLAKE model does not include internal sediment recycling, which EPA New England agrees is appropriate for a watershed model (i.e., a model that provides an estimate of net external load to a waterbody). Internal recycling, however, is a potential source of phosphorus loading to Leesville Pond, and MADEP has appropriately included it in the proposed TMDL load allocation.

To estimate existing TP loadings, MADEP reviewed a mass-balance nutrient budget developed in the D/F study (Ganzon and Sutt, 1990), and modified results from that study using the NPSLAKE model. MADEP believes this modification was necessary because Ganzon and Sutt overestimated phosphorus loading to the pond by not considering water diverted from about 7 mi² of watershed area for a water supply (See TMDL, p. 10-11). MADEP also believes that the D/F study overestimated the lake's average hydraulic residence time (61 days vs MADEP's estimate of 2 days), which added to the overestimate of phosphorus loading. Use of the NPSLAKE model yielded an estimate of 1327 kg/yr TP loading from the Leesville Pond watershed.

In addition to using the NPSLAKE model, MADEP estimated the loading by applying a simple loading model using in-lake water-quality data. This model calculates load (L) by simply multiplying flow (Q) by concentration (C) (i.e., $L=QC$). In this case, an estimate of total yearly flow into the lake (based on the average runoff of 24.0 in/yr in this geographic region) was multiplied by the current concentration of phosphorus in the North Basin (60 ppb TP). MADEP estimated a TP loading of 1586 kg/yr using this approach. This estimate agreed well with results of the NPSLAKE model, and allowed MADEP to estimate loading from internal recycling as the difference between the two model estimates (259 kg/yr TP).

EPA New England concurs with MADEP's use of a hybrid approach for estimating TP loadings, an approach that combines use of (1) a mass-balance nutrient budget, which incorporates actual monitoring data from Leesville Pond; (2) the NPSLAKE model, which was developed using data from many D/F studies for lakes and ponds in Massachusetts; and (3) a simple in-lake model, which also uses actual lake monitoring data.

Natural background loadings were not distinguished from the total nonpoint source load. In this case, not separating natural background is reasonable because nonpoint-source loadings were estimated using landuse categories, which do not identify individual nutrient sources within each category. EPA New England believes that the effort to collect site-specific information for the purpose of separating natural background from the total nonpoint source load would add little value to the analysis.

Important assumptions made in developing the TMDL are discussed (See TMDL, p. 16). It is assumed that control of TP loading will reduce aquatic weed growth and the potential for algal blooms. It is assumed to be appropriate to model the lake as a simple batch reactor. In-lake TP concentrations are based on conditions in the North Basin, which MADEP assumes better represents the P loading of the lake system than the largely stagnant South Basin; EPA New

England concurs with this assumption. Hydraulic loading was estimated using the NPSLAKE model, which assumes that 24 inches of runoff occur annually in the watershed. In addition, the TMDL assumes that land uses are accurately represented by the MassGIS digital maps and that land use has not changed appreciably since the maps were compiled in 1985. This last assumption is supported by the statement by MADEP that there have been no reports of significant change in the watershed in the past 10 years (See TMDL, p. 12).

EPA believes that the technical approach used by MADEP to estimate pollutant loading of Leesville Pond is reasonable and consistent with widely accepted methods commonly used in lake nutrient-management studies.

2. Description of the Applicable Water Quality Standards and Numeric Water Quality Target

The TMDL submittal must include a description of the applicable State/Tribe water quality standard, including the designated use(s) of the waterbody, the applicable numeric or narrative water quality criterion, and the antidegradation policy. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation. A numeric water quality target for the TMDL (a quantitative value used to measure whether or not the applicable water quality standard is attained) must be identified. If the TMDL is based on a target other than a numeric water quality criterion, then a numeric expression, usually site specific, must be developed from a narrative criterion and a description of the process used to derive the target must be included in the submittal.

Water-quality standards (WQSs) have been violated for nutrients and organic enrichment/low DO in Leesville Pond. The TMDL describes the applicable WQSs, which include designated uses, narrative criteria, and an antidegradation policy. Leesville Pond is listed as a Class B water. It is designated as a warm-water fishery and uses include primary and secondary contact recreation and aesthetics (See TMDL pp.13-14).

MADEP has interpreted its narrative criteria for Leesville Pond by selecting a quantitative water-quality target using in-lake TP. The TP target was set at a level of 40 ppb. MADEP predicts that by reducing the external (i.e., watershed) TP load and by installing a discharge pipe to increase flow through the southern basin of the lake, nuisance algal blooms will be less likely to occur and Water Quality Standards will be attained.

3. Loading Capacity - Linking Water Quality and Pollutant Sources

As described in EPA guidance, a TMDL identifies the loading capacity of a waterbody for a particular pollutant. EPA regulations define loading capacity as the greatest amount of loading that a water can receive without violating water quality standards (40 C.F.R. § 130.2(f)). The loadings are required to be expressed as either mass-per-time, toxicity or other appropriate measure (40 C.F.R. § 130.2(i)). The TMDL submittal must identify the waterbody's loading capacity for the applicable pollutant and describe the rationale for the method used to establish the cause-and-effect relationship between the numeric target and the identified pollutant sources. In most instances, this method will be a water quality model. Supporting documentation for the TMDL analysis must also be contained in the submittal, including the basis for assumptions, strengths and weaknesses in the analytical process, results from water quality modeling, etc. Such information is necessary for EPA's review of the load and wasteload allocations which are required by regulation.

In many circumstances, a critical condition must be described and related to physical

conditions in the waterbody as part of the analysis of loading capacity (40 C.F.R. § 130.7(c)(1)). The critical condition can be thought of as the “worst case” scenario of environmental conditions in the waterbody in which the loading expressed in the TMDL for the pollutant of concern will continue to meet water quality standards. Critical conditions are the combination of environmental factors (e.g., flow, temperature, etc.) that results in attaining and maintaining the water quality criterion and has an acceptably low frequency of occurrence. Critical conditions are important because they describe the factors that combine to cause a violation of water quality standards and will help in identifying the actions that may have to be undertaken to meet water quality standards.

MA DEP proposes to set the loading capacity for Leesville Pond at 1060 kg/yr of total phosphorus, a reduction of 526 kg/yr from current levels (579 kg/yr with MOS included - see TMDL Review Element #6 below), to reduce average in-lake TP concentrations from 60 ppb to 40 ppb (See TMDL p. 15).

The loading capacity was set to protect water quality and support uses during *critical conditions* which, for Leesville Pond, occur during the summer season when environmental conditions (e.g., higher temperatures, increased light intensity, etc.) are most favorable for growth of phytoplankton and macrophytes. Attainment of Water Quality Standards will rely on a source-reduction program that includes (1) increasing flow through the southern basin of Leesville Pond by replacing the existing culvert with a discharge pipe and (2) a watershed survey with targeted BMPs (See TMDL, pp. 14-15).

The NPSLAKE model used by MADEP to estimate pollutant loading for Leesville Pond falls within a class of empirical phosphorus models that are widely used among lake managers in New England. The NPSLAKE model was developed by linking actual water-quality data from lakes and ponds throughout Massachusetts to pollutant loading from the associated watershed. MADEP justifies the use of the NPSLAKE model because this model produces an estimate of TP loading for Leesville Pond that agrees well with an estimate based on average yearly flow into Leesville Pond multiplied by average in-lake TP concentration.

The Leesville Pond submittal includes documentation supporting the technical approach and key assumptions used in the analysis. The TMDL document discusses some of the limitations that are inherent in analyses involving nonpoint pollution sources and aquatic macrophytes in lakes. A principal strength is that the approach includes the use of existing data in conjunction with an empirical model to estimate current TP loading to the pond. Weaknesses in the approach are the lack of information about specific pollution sources and uncertainties concerning the relationship between pollutant loadings and aquatic macrophyte growth.

EPA New England concludes that MADEP has used a reasonable approach to establish the relationship between pollutant loading and water quality, and concurs that it is appropriate to express the TMDL as an annual loading based on the reasons provided by MADEP. However, EPA New-England interprets the target Phosphorous concentration of 40ppb as an average summer value.

4. Load Allocations (LAs)

EPA regulations require that a TMDL include LAs, which identify the portion of the loading capacity allocated to existing and future nonpoint sources and to natural background (40 C.F.R. § 130.2(g)). Load allocations may range from reasonably accurate estimates to gross allotments (40 C.F.R. § 130.2(g)). Where it is possible to separate natural background from nonpoint sources, load allocations should be described separately for background and for nonpoint sources.

If the TMDL concludes that there are no nonpoint sources and/or natural background, or the TMDL recommends a zero load allocation, the LA must be expressed as zero. If the TMDL recommends a zero LA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero LA implies an allocation only to point sources will result in attainment of the applicable water quality standard, and all nonpoint and background sources will be removed.

The TMDL sets the total of all load allocations for existing and future nonpoint sources to 736 kg/yr TP. Loads are allocated for four landuse categories (Forest, Agriculture, Open Land, and low-density Residential), septic systems, and internal recycling from lake sediments. Load reductions are proposed for three of these landuse categories (Agriculture, Open Land, and low-density Residential), and for internal recycling as shown in Table 2 (TMDL, p. 16). To reach the target TP load allocation of 736 kg/yr TP, existing loads will need to be reduced by 313 kg/yr TP from all nonpoint sources.

5. Wasteload Allocations (WLAs)

EPA regulations require that a TMDL include WLAs, which identify the portion of the loading capacity allocated to existing and future point sources (40 C.F.R. § 130.2(h)). If no point sources are present or if the TMDL recommends a zero WLA for point sources, the WLA must be expressed as zero. If the TMDL recommends a zero WLA after considering all pollutant sources, there must be a discussion of the reasoning behind this decision, since a zero WLA implies an allocation only to nonpoint sources and background will result in attainment of the applicable water quality standard, and all point sources will be removed.

In preparing the wasteload allocations, it is not necessary that each individual point source be designated a portion of the allocation of pollutant loading capacity. When the source is a minor discharger of the pollutant of concern or if the source is contained within an aggregated general permit, an aggregated WLA can be designated to the group of facilities. But it is necessary to allocate the loading capacity among individual point sources as necessary to meet the water quality standard.

The TMDL submittal should also discuss whether a point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur. In such cases, the State/Tribe will need to demonstrate reasonable assurance that the nonpoint source reductions will occur within a reasonable time.

The TMDL sets the total of all Wasteload Allocations for existing and future point sources to 271 kg/yr TP. Wasteloads are allocated for stormwater from landuse areas classified as “high-density Residential” and Commercial/Industrial”. Stormwater discharges in this watershed are regulated under the EPA NPDES Phase I Stormwater program.

6. Margin of Safety (MOS)

The statute and regulations require that a TMDL include a margin of safety to account for any lack of knowledge concerning the relationship between load and wasteload allocations and water quality (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1)). EPA guidance explains that the MOS may be implicit, i.e., incorporated into the TMDL through conservative assumptions in the analysis, or explicit, i.e., expressed in the TMDL as loadings set aside for the MOS. If the MOS is implicit, the conservative assumptions in the analysis that account for the MOS must be described. If the MOS is explicit, the loading set aside for the MOS must be identified.

The Leesville Pond TMDL includes an explicit MOS of 5% (53 kg/yr) which has been set aside as unallocated (draft TMDL, p. 13). Loading capacity is 1060 kg/yr TP; an explicit 5% MOS was subtracted, resulting in a total load allocation of 1007 kg/yr.

EPA New England concludes that the significant loading reductions proposed in the TMDL (579 kg/yr TP below current estimated loading), which include a 5% explicit MOS, is likely to reduce the problem of excessive macrophyte growth, although this reduction may not be evident for some years due to internal recycling of phosphorus from pond sediments. We concur with MADEP that in-lake management to control macrophytes is an essential component of any plan to attain water-quality standards in Leesville Pond.

EPA New England agrees that MA DEP’s commitment to conduct post-implementation monitoring to assess the adequacy of the TMDL helps to address the uncertainty of the relationship between phosphorus loading and macrophyte growth and provides some assurance that standards will ultimately be met in Leesville Pond. Moreover, if post-implementation monitoring indicates that the TMDL is inadequate, EPA New England will require MADEP to revise the TMDL.

7. Seasonal Variation

The statute and regulations require that a TMDL be established with consideration of seasonal variations. The method chosen for including seasonal variations in the TMDL must be described (CWA § 303(d)(1)(C), 40 C.F.R. § 130.7(c)(1)).

The Leesville Pond TMDL is expressed in terms of allowable annual loadings of total phosphorus rather than daily loadings. As specified in 40 CFR 130.2(i), TMDLs may be expressed in terms of either mass per unit time, toxicity or other appropriate measure.

Although the flushing rate in Leesville Pond is much faster (about two days) than in most ponds, MADEP justifies setting an annual rather than a daily load. Leesville Pond's overall nutrient state is largely expressed by excessive aquatic plant growth and accumulation of nutrients in sediments, both of which are a function of long-term average, rather than short-term daily, pollutant loadings.

EPA-New England concludes that seasonal variations have been adequately accounted for in the TMDL.

8. Monitoring Plan for TMDLs Developed Under the Phased Approach

EPA's 1991 document, Guidance for Water Quality-Based Decisions: The TMDL Process (EPA 440/4-91-001), recommends a monitoring plan when a TMDL is developed under the phased approach. The guidance recommends that a TMDL developed under the phased approach also should provide assurances that nonpoint source controls will achieve expected load reductions. The phased approach is appropriate when a TMDL involves both point and nonpoint sources and the point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur. EPA's guidance provides that a TMDL developed under the phased approach should include a monitoring plan that describes the additional data to be collected to determine if the load reductions required by the TMDL lead to attainment of water quality standards.

The draft TMDL describes the extent of MADEP's proposed monitoring and monitoring schedule. Monitoring will be done according to the 5-year MA watershed cycle, with the Blackstone basin scheduled for monitoring in 2003. Monitoring will include flow, TP, TSS, and Secchi Disk Transparency, on a bimonthly basis. Also, MAEP will work with and encourage the Leesville Pond Watershed Association to monitor the lake and identify pollution sources in the watershed.

EPA New England concludes that the proposed monitoring by MA DEP together with the ongoing annual volunteer monitoring will be sufficient to evaluate the adequacy of the TMDL. Collection of annual in-lake TP data by the Leesville Pond Watershed Association that are of acceptable quality to MADEP will greatly facilitate MADEP's ability to evaluate the effectiveness of controls and the adequacy of the TMDL.

9. Implementation Plans

On August 8, 1997, Bob Perciasepe (EPA Assistant Administrator for the Office of Water) issued a memorandum, "New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs)," that directs Regions to work in partnership with States/Tribes to achieve

nonpoint source load allocations established for 303(d)-listed waters impaired solely or primarily by nonpoint sources. To this end, the memorandum asks that Regions assist States/Tribes in developing implementation plans that include reasonable assurances that the nonpoint source load allocations established in TMDLs for waters impaired solely or primarily by nonpoint sources will in fact be achieved. The memorandum also includes a discussion of renewed focus on the public participation process and recognition of other relevant watershed management processes used in the TMDL process. Although implementation plans are not approved by EPA, they help establish the basis for EPA's approval of TMDLs.

The Leesville Pond TMDL implementation plan is described in the TMDL on pages 16-22. The proposed plan has two components: (1) installation of a pipe to flush the south basin and (2) a watershed survey with targeted BMPs to reduce sources of phosphorus. The plan outlines a process for collecting additional information to identify phosphorus sources, provide watershed residents with nonpoint source pollution and lake water quality education, and give guidance to apply for grant and loan funding to control sources once they are identified. Tasks and responsible parties are identified in Table 3 (See TMDL, p. 17-22).

The document also discusses the necessity for in-lake management practices to control the macrophytes to acceptable levels. In-lake management practices, such as dredging at selected areas, are considered a necessary component of a restoration plan to attain water-quality standards because of the presence of extensive shallow-water areas in Leesville Pond that are ideal for rooted macrophyte growth (See TMDL, p. 21).

10. Reasonable Assurances

EPA guidance calls for reasonable assurances when TMDLs are developed for waters impaired by both point and nonpoint sources. In a water impaired by both point and nonpoint sources, where a point source is given a less stringent wasteload allocation based on an assumption that nonpoint source load reductions will occur, reasonable assurance that the nonpoint source reductions will happen must be explained in order for the TMDL to be approvable. This information is necessary for EPA to determine that the load and wasteload allocations will achieve water quality standards.

In a water impaired solely by nonpoint sources, reasonable assurances that load reductions will be achieved are not required in order for a TMDL to be approvable. However, for such nonpoint source-only waters, States/Tribes are strongly encouraged to provide reasonable assurances regarding achievement of load allocations in the implementation plans described in section 9, above. As described in the August 8, 1997 Perciasepe memorandum, such reasonable assurances should be included in State/Tribe implementation plans and "may be non-regulatory, regulatory, or incentive-based, consistent with applicable laws and programs."

Reasonable assurances that the Leesville Pond TMDL will be implemented are provided through current regulations, availability of financial incentives and the existence of various local, state, and federal pollution-control programs. Table 3 lists the proposed implementation tasks and

responsible groups. Many of the implementation tasks related to phosphorus reduction are the responsibility of either MADEP or the watershed team which is led by the MA Executive Office of Environmental Affairs (EOEA). EPA New England has the opportunity through the Performance Partnership Agreement (PPA) process to work with MADEP to provide reasonable assurances for implementing the Leesville Pond TMDL. The responsible groups for tasks related primarily to outreach programs and developing funding proposals include the Leesville Pond Association and the Blackstone Watershed Association.

11. Public Participation

EPA policy is that there must be full and meaningful public participation in the TMDL development process. Each State/Tribe must, therefore, provide for public participation consistent with its own continuing planning process and public participation requirements (40 C.F.R. § 130.7(c)(1)(ii)). In guidance, EPA has explained that final TMDLs submitted to EPA for review and approval must describe the State/Tribe's public participation process, including a summary of significant comments and the State/Tribe's responses to those comments. When EPA establishes a TMDL, EPA regulations require EPA to publish a notice seeking public comment (40 C.F.R. § 130.7(d)(2)).

Inadequate public participation could be a basis for disapproving a TMDL; however, where EPA determines that a State/Tribe has not provided adequate public participation, EPA may defer its approval action until adequate public participation has been provided for, either by the State/Tribe or by EPA.

The public participation process for the Leesville Pond TMDL is described on page 23 of the final document. MADEP held a preliminary public meeting on November 10, 1999. The final public meeting was held on November 1, 2001 to discuss the findings of the TMDL. MADEP has provided, in the final submittal, a clear record of comments received and MADEP's responses to those comments. (See TMDL pps. 23-26). Appendix II of the submittal provides results of a lake-management questionnaire returned to MADEP by the Leesville Pond Association.

EPA-New England concludes that MADEP has done an excellent job involving the public during the development of the TMDL, and has provided adequate opportunities for the public to comment on the TMDL. Additionally, MADEP has provided, in the final submittal, a clear record of comments received and MADEP's responses to those comments. EPA-New England concludes, based on a review of Appendix II and pages 23-26, that MADEP has adequately responded to all public comments.

12. Submittal Letter

A submittal letter should be included with the TMDL analytical document, and should specify whether the TMDL is being submitted for a technical review or is a final submittal. Each final TMDL submitted to EPA must be accompanied by a submittal letter that explicitly states that the submittal is a final TMDL submitted under Section 303(d) of the Clean Water Act for EPA review and approval. This clearly establishes the State/Tribe's intent to submit, and EPA's duty to review, the TMDL under the statute. The submittal letter, whether for technical review

or final submittal, should contain such information as the name and location of the waterbody, the pollutant(s) of concern, and the priority ranking of the waterbody.